


















# International Survey of Psychosocial Care for Cancer Survivors in Low-/Middle- and High-Income Countries: Current Practices, Barriers, and Facilitators to Care

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## ABSTRACT

**PURPOSE** The number of cancer survivors living with and beyond cancer treatment is rising globally. It is fundamental to understand the extent and type of psychosocial care services offered worldwide. We evaluated models of cancer survivorship care, psychosocial care practices in the post-treatment survivorship phase, and barriers/facilitators to delivery of psychosocial care services, including in low- and middle-income countries (LMICs).

**METHODS** The International Psycho-Oncology Society (IPOS) Survivorship Special Interest Group led a cross-sectional online survey between March and November 2022. Health care professionals and researchers in psycho-oncology were invited through the IPOS global membership, social media, and snowballing. The survey was administered to individuals but included questions related to practices in their country at a national level.

**RESULTS** Two hundred eighty-three respondents from 37 countries participated (40% from LMICs), with a median of 12 years of experience (IQR, 6–20) in the psycho-oncology field. Participants reported that the most common elements of routine survivorship care were related to the prevention/management of recurrences/new cancers (74%), physical late effects (59%), and chronic medical conditions (53%), whereas surveillance/management of psychosocial late effects (27%) and psychosocial/supportive care (25%) were least common. Service availability was more commonly reported in high-income countries (HICs) than LMICs related to reproductive health (29% v 17%), genetic counseling/support (40% v 20%), and identifying/managing distress (39% v 26%) and pain (66% v 48%). Key barriers included providers focusing on treatment not survivorship (57%), medical not psychosocial care (60%), and a lack of allied health providers to deliver psychosocial care (59%).

**CONCLUSION** The psychosocial needs of people living with cancer are not adequately available and/or provided in post-treatment survivorship even in HICs, because of barriers at patient, provider, and system levels.

## ACCOMPANYING CONTENT

 Appendix

 Data Supplement

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## INTRODUCTION

Advances in earlier diagnosis and treatment worldwide have resulted in a burgeoning population of individuals living with and beyond cancer.<sup>1,2</sup> The global burden of cancer is estimated to account for 250 million disability-adjusted life years lost because of premature mortality and years lived with disease-related physical or mental functional

limitations.<sup>3</sup> In the years and decades post-treatment completion, cancer survivors face substantial long-term physical (eg, cardiac dysfunction, subsequent cancers) and mental health complications (eg, fatigue, pain, distress, fear of cancer recurrence) associated with cancer and its treatment.<sup>4–8</sup> Similarly, cancer in early childhood or during adolescence can substantially affect a young person's health and psychosocial development, well into adulthood.<sup>9–11</sup>

## CONTEXT

### Key Objective

What are the characteristics of survivorship care and psychosocial care in the post-treatment phase worldwide and the barriers/facilitators related to the delivery of psychosocial care in high-income and low- and middle-income countries?

### Knowledge Generated

The International Psycho-Oncology Society conducted a cross-sectional online survey examining cancer survivorship care models, psychosocial practices, and barriers/facilitators to service delivery. Survey results suggest that routine survivorship care predominantly emphasizes physical aspects like preventing recurrences (74%) and managing late physical effects (59%), with comparatively less focus on psychosocial elements. Critical barriers identified included health care providers prioritizing treatment over survivorship, emphasizing medical rather than psychosocial care, and grappling with a shortage of allied health providers.

### Relevance

The growing global population of cancer survivors necessitates a comprehensive evaluation of psychosocial care services on a worldwide scale. This research highlights the global challenges in addressing psychosocial needs during post-treatment cancer survivorship, warranting ongoing collaborative efforts worldwide to improve psychosocial care for cancer survivors.

Considerable attention has focused on psychosocial care during cancer treatment, showing direct improvements in *quality* of life (ie, psychological, social, personal, relational, and vocational well-being) and indirect improvements in *quantity* of life (ie, symptom control, reduced emergency department visits and hospitalizations, improved overall survival, and health care–related costs).<sup>12</sup> Despite increasing global awareness of the psychosocial needs of cancer survivors, including advocacy for psychosocial cancer care as a human right, many patients with cancer face unmet psychosocial needs in the post-treatment survivorship phase globally.<sup>13,14</sup> Traditional models of oncologist–led follow-up care are not sustainable for the growing population of survivors, and evidence suggests that they are ineffective in meeting the complex psychosocial needs of cancer survivors.<sup>15–17</sup> Alternative survivorship care approaches have been developed for both pediatric and adult cancer survivors.<sup>5,17,18</sup> Although these models are more psychosocially grounded, a recent meta-review highlighted that studies were primarily conducted in breast cancer and colorectal cancer survivors and in Western/high-income countries (HICs).<sup>17</sup>

A substantial knowledge gap remains in how psychosocial care is provided to cancer survivors across different cancer types internationally, particularly from those in low- and middle-income countries (LMICs).<sup>19</sup> A recent survey highlighted psychosocial support issues as a key challenge in survivorship care,<sup>20</sup> although it did not explore psychosocial issues in depth and was limited to the care of breast and colorectal cancer survivors, and respondents included only one representative with expertise in survivorship care per country. Greater

knowledge is needed about psychosocial care for cancer survivors worldwide, across cancer sites, and particularly in LMIC settings. We conducted an international survey of health professionals to

1. Characterize models of survivorship care in the post-treatment phase and psychosocial care practices.
2. Identify patient-, provider-, and system-level barriers and facilitators related to the delivery of psychosocial care in HICs and LMICs.

## METHODS

### Study Design

This international online cross-sectional survey was developed by the International Psycho-Oncology Society (IPOS) Survivorship Special Interest Group (SIG). The SIG is a geographically and culturally diverse group comprising psycho-oncology care providers, health care professionals, researchers, and academics. The survey was developed to align with the recently published quality of cancer survivorship care framework<sup>21</sup> to ensure that they reflected the evidence-based domains identified as critical for the optimal delivery of psychosocial care. Survey questions included a combination of purpose-built items and questions from (or adapted from) previous surveys addressing models of survivorship care<sup>20</sup> and barriers/facilitators to care.<sup>22–24</sup> We invited representatives from culturally diverse backgrounds and HICs (n = 17) and LMICs (n = 11) to provide feedback on the draft survey, to ensure that the content was culturally appropriate and relevant. Ethics approval was obtained

from the University of New South Wales (reference: HC220079).

## Participants/Recruitment

Health care providers, researchers, and other professionals in the field of psycho-oncology and survivorship were eligible to participate, including oncologists, nurses, psychologists, psychiatrists, social workers, and general practitioners/primary care physicians. We invited participants via e-mail through the global membership of IPOS, which has >700 psychosocial oncology professional and early career/student members from >100 countries including LMICs. Targeted sampling methods helped to ensure representation from LMICs, for example, via the IPOS Federation Societies networks—which comprises representatives from national psycho-oncology societies globally—and through other relevant IPOS SIGs (eg, the LMICs SIG). We also used snowball techniques to maximize recruitment efforts, by including a shareable link in the survey invitation and at the end of the survey for participants to forward to others. The survey was advertised to members of charities/nongovernment organizations and via social media.

## Data Collection and Measures

We collected data between March and November 2022. Participants completed the 15- to 20-minute survey online via Qualtrics (Provo, UT). [Table 1](#) shows an overview of the survey outcome measures including demographic information (eg, participant's role, field of specialization), current models of survivorship care, practices (eg, referral pathways, providers), and key elements of psychosocial care (eg, identifying/managing distress) in the post-treatment survivorship phase specifically (for a full copy, see the Data Supplement).

## Data Analysis

Data were analyzed using SPSS version 27.0 (IBM Corp 2020, Armonk, NY). We analyzed quantitative responses descriptively and conducted planned comparisons between groups (ie, by income category) using t-tests and chi-squared tests. Countries' income status was classified for analysis according to the World Bank classifications for LMICs and HICs.<sup>25</sup> Results were considered significant if  $P < .05$  (two-tailed).

**TABLE 1.** Description of Survey Data Collected for This Analysis

Domain	Description
Demographic data	Including participants' role, field of specialization, primary setting, country, and years of experience in their field <i>Health insurance</i> Coverage type (eg, public, universal funding) Extent of coverage using three response options ranging from "Many cancer patients do not have coverage" to "All cancer patients are fully covered"
Survivorship definition	Definition of survivorship typically used nationally
Models of survivorship care	Primary model used (eg, oncologist-led, shared care) using five response options dichotomized for analysis as "Not used at all" and "used a little" v "Commonly used" and "very commonly used"
Elements of survivorship care	The extent to which various elements are routinely included in care (eg, health behavior promotion, surveillance for second cancers) each using five response options ranging from "Not at all" to "Always included"
Post-treatment psychosocial services	<i>Use of psycho-oncology guidelines</i> The primary source of psychosocial care guideline use (eg, national, institutional) How frequently guidelines are used in their country ranging from "None" or "Just a few (1%-10% of clinicians)" to "Almost all/most (>90% of clinicians)" <i>Screening and referrals for psychosocial services</i> The extent to which psychosocial services are offered, in what setting, referral pathway (eg, by their primary care physician, self-referrals), and providers of psychosocial care (eg, oncologists, social worker) each using five response options ranging from "Never" to "Always" <i>Setting and mode of psychosocial care delivery</i> Routine settings for follow-up care (eg, treating hospital, cancer centers) and mode of delivery (eg, in person, online) using five response options ranging from "Never" to "Always" <i>Psychosocial care services</i> The extent to which various services for psychosocial care are available (eg, support to self-manage care, support for caregivers) each using five response options ranging from "Not at all" to "Always available"
Barriers and facilitators to delivering optimal post-treatment psychosocial care	The extent to which various patient-, provider-, and system-level barriers and facilitators to delivering psychosocial care in the post-treatment survivorship phase exist A list of 27 barriers were rated using three responses options ranging from "Not at all a barrier" to "A frequent barrier" A list of 17 facilitators were rated on the basis of the extent of agreement with each statement using four response options ranging from "Strongly disagree" to "Strongly agree"
Confidence in responses	Participants' self-rated confidence that their responses are representative of the average practices in their country using 4 response options ranging from "Not at all confident" to "Very confident"

NOTE. A copy of the full survey can be found in the Data Supplement.

**TABLE 2.** Survey Respondents' Characteristics (N = 283)

Characteristic	No. (%)
Primary country of residence/practice by region <sup>a</sup>	
Europe	109 (39)
Asia	58 (21)
North America	45 (16)
South America	29 (10)
Oceania	26 (9)
Africa	16 (6)
Country World Bank income category, US dollars (USD)	
Low income (<\$1,135 USD Gross National Income per capita)	8 (3)
Lower-middle-income (\$1,136 USD to \$4,465 USD)	44 (16)
Upper-middle-income (\$4,466 USD to \$13,845 USD)	62 (22)
High income (>\$13,846 USD Gross National Income per capita)	169 (60)
Current role <sup>b</sup>	
Clinical/health psychologist	123 (44)
Researcher	79 (28)
Academic	40 (14)
Nurse	39 (14)
Counselor	27 (10)
Psychiatrist	22 (8)
Oncologist	16 (6)
Social worker	12 (4)
Other <sup>c</sup>	45 (16)
Area of specialization by age <sup>b</sup>	
Pediatric cancers (<18 years)	40 (14)
Adolescent and young adult cancer (15-45 years)	55 (19)
Adult cancer (>18 years)	195 (68)
Older adults (65+ years)	61 (22)
All/multiple ages	72 (25)
Area of specialization by cancer type <sup>c</sup>	
Breast cancer	93 (33)
Leukemia/myeloma	45 (16)
Colorectal cancer	39 (14)
Gynecologic cancers	38 (13)
Lymphoma	35 (12)
Lung cancer	34 (12)
Brain cancers	27 (10)
Prostate cancer	27 (10)
Head and neck, thyroid cancer	27 (9)
Upper gastrointestinal (liver, pancreatic, gastric)	25 (9)
Sarcoma/bone	19 (7)
Urologic (kidney, bladder)	14 (5)
Skin cancers (including melanoma)	12 (4)
All/multiple cancers	153 (53)
Primary setting of work/practice	
Hospital/cancer center	179 (63)
Primary care setting (eg, general or private practice)	31 (11)
Nongovernment organization or charity	43 (15)
University or academic	82 (29)
Academic medical center	29 (10)

(continued in next column)

**TABLE 2.** Survey Respondents' Characteristics (N = 283) (continued)

Characteristic	No. (%)
No. of years of experience	
Median	12.0
IQR	6-20

NOTE. Numbers and percentages may not add up because of rounding errors or missing data.

<sup>a</sup>See the Data Supplement for the full list of countries.

<sup>b</sup>Participants were able to select multiple response options.

<sup>c</sup>Other responses included psycho-oncologist (n = 5), psychosexual therapist (n = 4), consumer or patient advocate (n = 3), general practitioner/family or primary care physician (n = 3), physiotherapist (n = 2), or policy maker (n = 3).

## Consent

All survey respondents provided written consent at the commencement of the survey before proceeding to complete the survey.

## RESULTS

### Sample Characteristics

Four hundred and eight surveys were started or submitted, of which 283 were included in the analysis on the basis of data completeness (>70% of items). Of these, respondents were from 37 unique countries across six global regions (Table 2). Sixty percent of participants were from HICs (n = 170), including 28 (9.9%) responses from the United States and 25 (8.8%) from Australia (n = 25, Data Supplement). Participants representing LMICs resided primarily in India (n = 21, 7.4%) and Brazil (n = 15, 5.3%). Most respondents were in patient-facing roles (68%) and based in hospital settings or cancer centers (63%). The majority reported specializing in adult cancers (68%), with diverse specialization by cancer type (primarily all or multiple cancers, 53%). Seventy-seven percent of respondents reported that they were confident or very confident that their responses were representative of average practices in their country, with at least 50% of respondents within each country confident/very confident in all but four countries.

### Definition of Survivorship

Participants reported a diverse range of responses regarding the definition of survivorship used in their country, including all patients from diagnosis through to the end of life (41%) and cured patients beginning at the end of treatment completion (34%). A small proportion included patients receiving palliative care or end-of-life care in their definition (7%). Twenty-five percent of respondents acknowledged that there was no uniform definition of survivorship used nationally.

## Models of Survivorship Care

Participants reported that the models of survivorship care commonly and very commonly used in their country were oncologist-led care (86%), primary care-led care (46%), shared care (32% ie, joint participation of tertiary and primary providers), nurse-led clinics (31%), or multidisciplinary survivorship clinics (22%). Oncologist-led models of care and multidisciplinary survivorship clinics were reported at similar levels among HICs and LMICs. The following models were more common in HICs: primary care-led (51% v 40%,  $\chi^2 = 12.867$ ,  $P = .005$ ), shared care (34% v 29%,  $\chi^2 = 13.194$ ,  $P = .004$ ), and nurse-led (34% v 27%,  $\chi^2 = 48.470$ ,  $P < .001$ ).

## Elements of Survivorship Care

Respondents reported the following elements of cancer survivorship care as the most common: the prevention/management of recurrences and new cancers (74%), physical late effects (59%), and chronic medical conditions (53%, Fig 1). Among the lowest endorsed elements were referral to allied health services (eg, psychologists, counsellors; 28%), followed by the surveillance/management of psychosocial late effects (27%) and psychosocial and supportive care (25%). The proportion of participants endorsing each element of care was similar across HICs and LMICs, although higher in HICs related to general health advice (50% v 38%,  $\chi^2 = 9.501$ ,  $P = .002$ ) and the surveillance/management of late effects (64% v 50%,  $\chi^2 = 5.550$ ,  $P = .018$ ) and of second cancers (82% v 60%,  $\chi^2 = 15.309$ ,  $P < .001$ ).

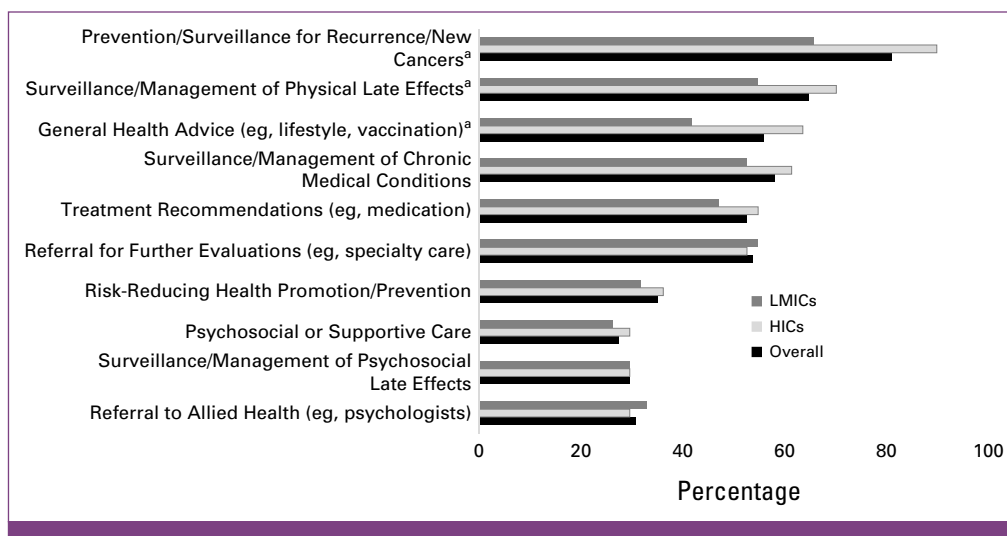
## Post-Treatment Psychosocial Services

### Use of Psycho-Oncology Guidelines

Reported guideline use varied greatly. Fifteen percent of participants reported that just a few (ie, 1%-10%) of clinicians in their countries use guidelines to inform post-treatment psychosocial care, followed by 15% who reported that most (60%-89%) clinicians use guidelines. Thirteen percent of respondents equally reported that some (10%-39%) or about half (40%-59%) of clinicians used psychosocial guidelines. Only 7% reported that most (>90% of clinicians) used guidelines. Guideline use appeared to be similar in HICs and LMICs. The primary reported source of psycho-oncology guidelines used by clinicians was national or international guidelines (18%) or a mix of guidelines (30%). The type of guidelines used was also similar across HICs and LMICs (all  $P > .05$ ). Some respondents reported that there were no available guidelines (9%) or that they were unsure of what was used (16%) in their country.

### Screening and Referrals for Psychosocial Services

For patients able to access post-treatment psychosocial care, needs were assessed by an oncologist (45%), a psychologist (38%), a nurse specialist (34%), or a questionnaire (30%) and less frequently assessed by a psychiatrist (17%) or a counselor (16%). Assessments by nurse specialists were higher in HICs (44%) than in LMICs (26%,  $\chi^2 = 8.743$ ,  $P = .003$ ), whereas assessments by psychiatrists and counsellors were higher in LMICs (34% v 24%,  $\chi^2 = 4.846$ ,  $P = .028$  and 54% v 34%,  $\chi^2 = 4.846$ ,  $P = .028$ , respectively). Overall, 34% of respondents reported that there were no



**FIG 1.** Key elements of routine survivorship care endorsed by participants overall and by income category (HICs v LMICs). Participants were able to select more than one response option. <sup>a</sup>Significant difference between HICs and LMICs,  $P < .05$ .



standard assessments of patients' psychosocial needs in survivorship in their country, similar in HICs and LMICs.

Participants reported that patients often or always access psychosocial services by referral from their treating cancer team or specialized survivorship service (55%), by self-referral (38%), or less commonly via community organization/charity (27%), or by their general practitioner/primary care physician (25%). Referral to psychosocial services was similar by countries' income status (all  $P > .05$ ) except for self-referral, which was higher in HICs (44%) than in LMICs (28%,  $\chi^2 = 19.311, P < .001$ ).

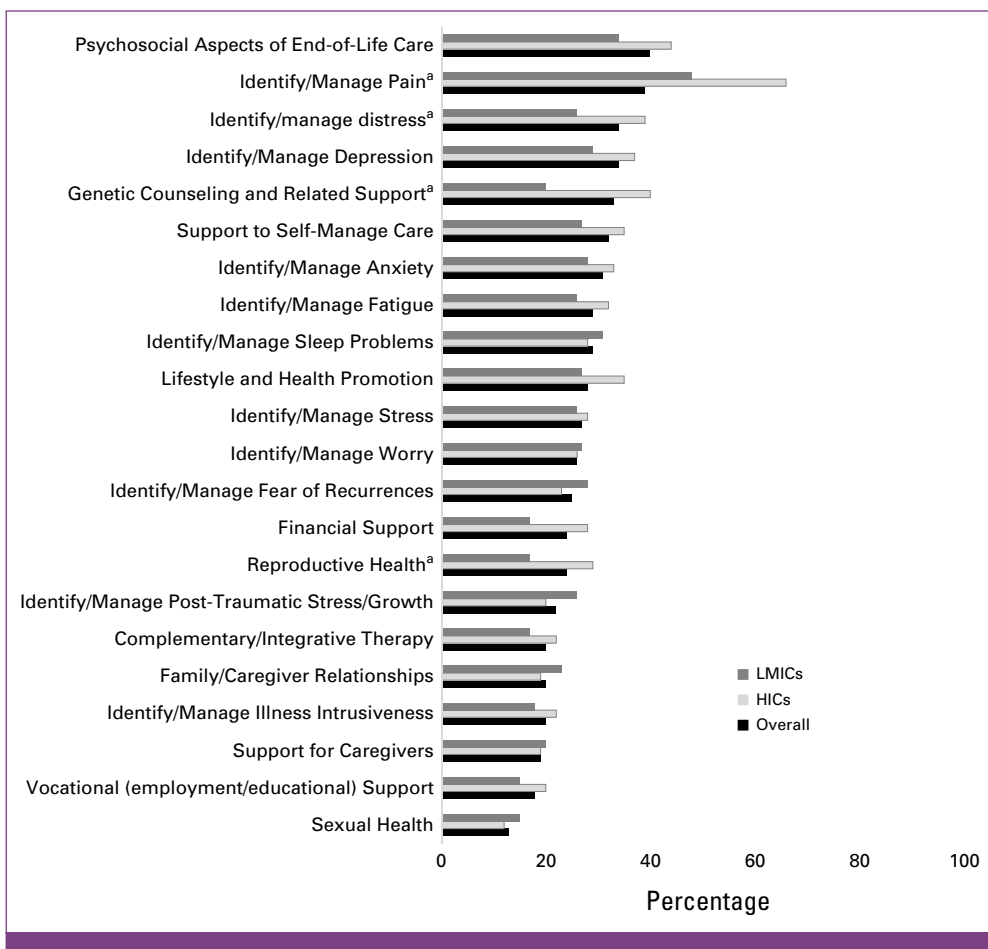
### Setting and Mode of Psychosocial Care Delivery

When access to post-treatment psychosocial care was available, it was often or always delivered in treating hospitals or cancer centers (53%), followed by palliative care centers (37%). Less common settings included community organizations or charities (32% overall, higher in HICs = 37% v 23% LMICs,  $\chi^2 = 25.870, P < .001$ ) and primary care (19% overall, higher in HICs = 21% v 15% LMICs,  $\chi^2 = 14.908, P = .005$ ).

Participants reported that the most common medium for psychosocial care delivery (before COVID-19 disease) was in person/face-to face (73%) and less often via telephone (13%) and videoconferencing (6%), similar across HICs and LMICs (all  $P > .05$ ). Clinical psychologists or psychiatrists delivered psychosocial care in most cases (57%), followed by social workers (34% overall, HICs = 41% v LMICs = 23%,  $\chi^2 = 10.352, P = .035$ ), counsellors (31% overall, HICs = 34% v LMICs = 26%,  $\chi^2 = 11.272, P = .024$ ), nurses (33%), oncology providers (27%), or general practitioners/primary care physicians (19%).

### Psychosocial Care Services

The most common post-treatment psychosocial services available were reported to be for psychosocial aspects of end-of-life care (40%) and the identification/assessment and management of pain (39%, Fig 2). The lowest endorsed services available were related to vocational (employment/educational) support (18%) and sexual health (13%). The proportion of participants endorsing each service were higher in HICs related to pain (66% v 48%,  $\chi^2 = 7.104,$



**FIG 2.** Psychosocial and supportive care services available to survivors in the survivorship phase endorsed by participants overall and by income category (HICs v LMICs). Participants were able to select more than one response option. <sup>a</sup>Significant difference between HICs and LMICs,  $P < .05$ .

$P = .008$ ), identifying/managing distress (39% v 26%,  $\chi^2 = 4.446$ ,  $P = .035$ ), genetic counseling/support (40% v 20%,  $\chi^2 = 10.095$ ,  $P = .001$ ), and reproductive health (29% v 17%,  $\chi^2 = 4.128$ ,  $P = .042$ ).

HICs = 50%,  $\chi^2 = 13.788$ ,  $P < .001$ ; LMICs = 78% v HICs = 56%  $\chi^2 = 9.513$ ,  $P = .002$ , respectively).

### Barriers and Facilitators to Delivering Optimal Psychosocial Care for Cancer Survivors

#### Barriers to Delivering Psychosocial Care

Almost all respondents (98%) endorsed at least one barrier to delivering optimal psychosocial care to cancer survivors in their country (Data Supplement). The most commonly reported patient-related barriers (ie, a frequent barrier) were incidental costs of accessing care (eg, travel, time off work, 49%) and that patients have poor access to care (eg, distance, timing, 48%). Among provider-level barriers, most commonly reported was that providers' focus is on treatment not survivorship (57%) and on medical not psychosocial care (60%). The highest reported system-level barriers were related to the fragmentation of care (50%) and lack of services to meet patient numbers (49%). The proportion of each barrier reported by participants in HICs and LMICs was similar (Fig 3). However, patients lacking prompt access to care was reported more frequently by participants in HICs (96% v LMICs = 88%,  $\chi^2 = 4.897$ ,  $P = .027$ ), whereas both the absence of psychosocial care within the national cancer plan and lack of clinical guidelines for psychosocial care were reported more frequently in LMICs (77% v

#### Facilitators of Psychosocial Care Delivery

Most participants (89%) reported at least one facilitator of delivering optimal psychosocial care to cancer survivors in their country (Data Supplement). The three highest reported patient-level facilitators (ie, strongly agree and agree) were good rapport between patients and psychosocial care providers (70%) and timely access to care, services, and results (67%). The most common provider-level facilitators were the availability of telehealth (66%) and rapid screening tools (59%). Among system-level factors, availability of psychosocial clinical practice guidelines (64%) and the emphasis of psychosocial care in the national cancer plan (60%) were most commonly highlighted. There were significant differences in several facilitators reported by participants in HICs and LMICs (Fig 4), for example, related to patients health literacy (HICs = 55% v LMICs = 39%,  $\chi^2 = 4.863$ ,  $P = .027$ ), financial support to access care (HICs = 54% v LMICs = 29%,  $\chi^2 = 11.510$ ,  $P < .001$ ), and patient satisfaction with care (HICs = 72% v LMICs = 58%,  $\chi^2 = 4.340$ ,  $P = .037$ ).

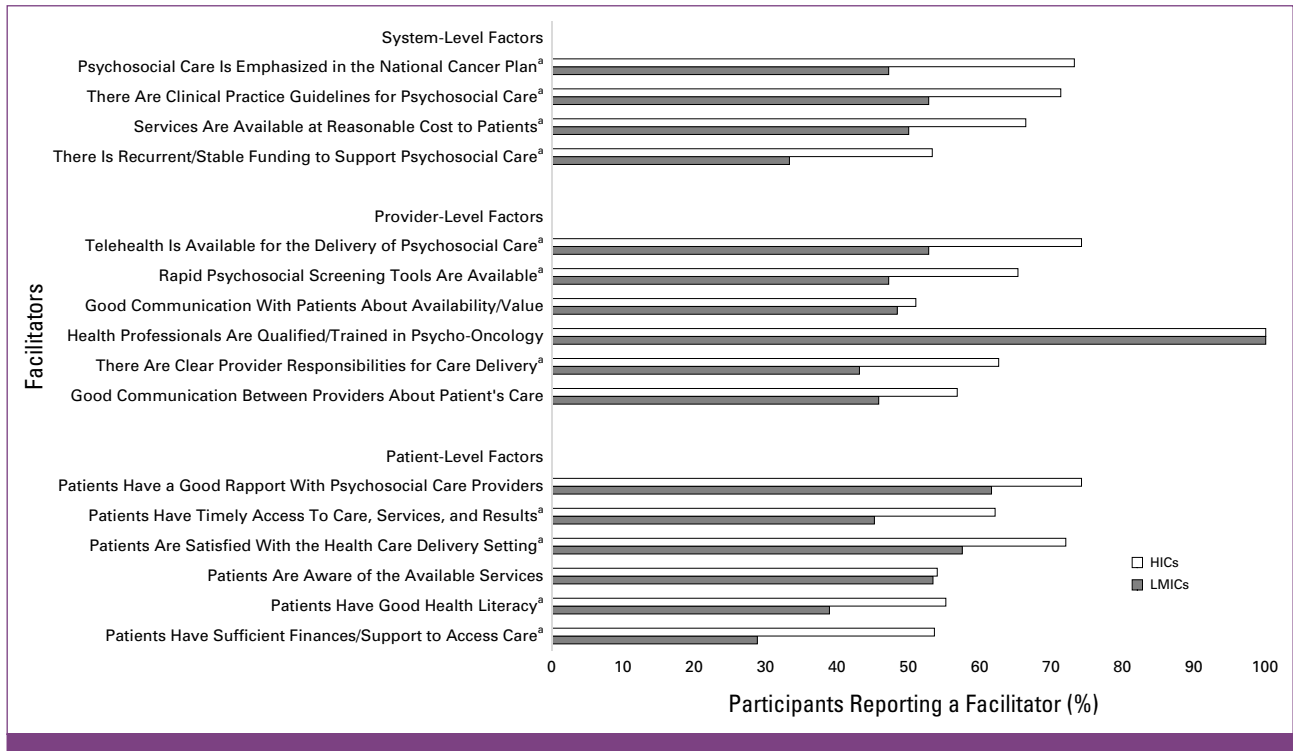
### DISCUSSION

In this international online survey of psycho-oncology health professionals, participants reported that comprehensive psychosocial care is generally not available and/or



**FIG 3.** Barriers to delivering optimal psychosocial care in the survivorship phase endorsed by participants. \*Significant difference between HICs and LMICs,  $P < .05$ .

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**FIG 4.** Facilitators to delivering optimal psychosocial care in the survivorship phase endorsed by participants. <sup>a</sup>Significant difference between HICs and LMICs,  $P < .05$ .

provided in the post-treatment survivorship phase, even in HICs. When psychosocial services were available, the focus tended to be on end-of-life care and pain management, with little to no attention given to other aspects of psychosocial care. Respondents reported several key barriers, which hindered the optimal delivery of psychosocial care in survivorship, particularly provider-related barriers, or low prioritization of psychosocial care at the national level. The most common facilitators were primarily related to patient-level factors such as patients' rapport with psychosocial care providers and satisfaction with health care delivery.

Participants in our study reported varying models of survivorship and psychosocial care, which likely reflected varying resources, infrastructure, and availability/use of clinical guidelines. Psycho-oncology guideline use appeared lower in our study (22% reporting almost all/most clinicians use guidelines) compared with approximately one third in other studies.<sup>26,27</sup> This may be attributable to the diversity of participants in our sample who had expertise across various cancer diagnoses, whereas established guidelines are typically targeted at a single diagnosis and/or psychological condition (eg, distress). Further effort is needed to effectively implement psycho-oncology guidelines and maximize their uptake particularly in lower-resource settings, given that guideline awareness is associated with increased clinician screening practices.<sup>27</sup> Yet, in some countries, addressing the need for psychosocial care and initiating changes in policy and practice is

particularly complex. For example, the concept of survivorship in developing countries represents a relatively new and emerging concept, which, coupled with the potential stigma associated with a cancer diagnosis and/or psychosocial care, presents additional challenges in some LMICs.<sup>28,29</sup> In these countries, a change in practice may first require increased awareness of psychosocial care in survivorship and take into account cultural factors that may be poorly understood, such as stigma.

Psychosocial care was commonly delivered in hospitals and cancer/palliative care centers and less commonly reported to be delivered in community organizations or in the primary care setting. The focus on end-of-life care and pain management is expected as patients and families prioritize minimizing pain and suffering, health professionals typically receive more training, and there is growing awareness for improving patient quality of life especially through palliative care initiatives. The concentration of psychosocial services in hospitals and cancer centers means that survivors living in rural or remote areas are less likely to access these services than if they were offered in community settings.<sup>30,31</sup> Community and nongovernment organizations play an important role in filling these gaps in the health care system, yet systematic referrals to their services may be underutilized. Further efforts are needed to understand their potential role in the delivery of psychosocial care for cancer survivors and how best to bridge this gap and facilitate communication with tertiary care providers.<sup>20</sup>



Common reported barriers to delivering optimal psychosocial care were primarily provider-related, indicating that the capacity building of the cancer workforce might help to fill service gaps. In addition, training of oncology providers should ideally be ongoing and focus on identifying at-risk individuals, effective communication, and conducting psychosocial screening/assessments. Accreditation may be an important driver of improved care, as used in the European Union (eg, the Quality Assurance Scheme for Breast Cancer Services). Emerging evidence suggests that a shared/collaborative care model—integrating multidisciplinary psychosocial services in routine oncology care, with clearly defined roles—may also offer better support for health care providers, facilitate more equitable and timely access to care, and are effective in diverse settings, although are yet to be implemented widely.<sup>32</sup>

Most participants endorsed a national cancer control plan (NCCP) that addresses psychosocial care in survivorship as a facilitator to optimal care. A recent analysis demonstrated that only 24% of countries addressed psycho-oncology in survivorship in their NCCP.<sup>33</sup> Given the emerging evidence that NCCPs can improve outcomes to guide resource prioritization and targeted resource development/implementation,<sup>34,35</sup> inclusion in NCCPs is a critical step toward improving the psychosocial outcomes of cancer survivors. Although many countries in the European Union have addressed psychosocial care in their NCCPs,<sup>22</sup> there remains an implementation gap in the development of adjacent policies with clear deliverables and the integration of clinical practice guidelines, which is a common challenge internationally.<sup>30</sup> Recently, the World Health Organization published the package of interventions for rehabilitation including a module specifically focused on cancer, highlighting the diverse psychosocial needs of cancer survivors (eg, fatigue, sleep problems, pain) and the importance of ongoing rehabilitation to address these.<sup>30</sup> This module is a welcomed step to address the significant gaps in care worldwide that have been identified in our survey.

A sustained global initiative is now needed to ensure that resource-stratified psychosocial care guidelines for the post-treatment survivorship phase are promoted and routinely included in global, national, and local cancer control plans with essential resources and attention directed to implement them. Improving access to psycho-oncology guidelines in LMICs involves addressing various challenges

related to health care infrastructure, resources, awareness, and cultural considerations. This relies on collaborations between health professionals and organizations globally including LMIC health care providers. The IPOS Survivorship SIG is committed to improving equitable psychosocial care for cancer survivors worldwide to propel change in the field through continuous global collaborations, by promoting resource-stratified guidelines and the inclusion of specific objectives in NCCPs that refer to psycho-oncology in the post-treatment survivorship phase.

This global survey of psychosocial care practices captured diverse responses across cancer types, age at diagnosis, and countries including LMIC representation and allowed for multiple responses in each country. This approach invited respondents to respond on a national, not local, level, which may not capture the diversity of practices within countries. It is also possible that participants might not have been aware of national practices although 77% reported that they were confident/very confident in their responses. It is also possible that clinician perspectives may not match patients' lived experience of the health system. Of the responses received, 30% (n = 125) were incomplete and excluded from analysis and we were unable to calculate a response rate given our recruitment methods. We are not able to ascertain the specific reason/s for noncompletion although it might have been due to the survey length or that participants with low confidence commenting on a national level might have opted out. Given our recruitment approach, we are unable to assess nonresponse bias although hope that our varied and broad recruitment strategy maximizes the diversity of responses in our sample. We received insufficient responses from those specializing exclusively in pediatric or adult cancer to be able to investigate potential differences although the distinct developmental stages, coping mechanisms, and family dynamics warrant further research comparing adult and pediatric practices.

In conclusion, our findings reveal that the needs of cancer survivors are generally unaddressed, even in HICs, and barriers exist on system, provider, and patient levels. This highlights the urgent need to increase national and global efforts to improve the quality of psychosocial care in survivorship. These efforts should be directed toward (inter) national research initiatives, collaborative models of care, early intervention/screening, and the development and implementation of resource-stratified guidelines.

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## DATA SHARING STATEMENT

The data sets generated and analyzed for the current study are not publicly available; however, deidentified data may be made available upon reasonable request.

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